MID-ATLANTIC ENVIRONMENTAL LAW CENTER

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Qazi Salahuddin
DNREC-SIRB
391 Lukens Drive
New Castle, DE 19720

RE: Schnabel Independent Study of DuPont Iron Rich Pile

Dear Mr. Salahuddin:

On behalf of Clean Air Council and Mid-Atlantic Environmental Law Center, I am pleased to submit the following comments to the Schnabel Engineering December 20, 2006 report entitled Hay Road Sludge Drying Site, Cherry Island, Wilmington, Delaware.

Introduction:

Clean Air Council is a 501(c)(3) organization with offices in Philadelphia, Wilmington, and Harrisburg, that advocates for everyone's right to breathe clean air. The Center is a 501(c)(3) organization based in Wilmington that provides legal services to environmental organizations and community groups in an effort to ensure that environmental law and regulation is properly implemented and enforced.

The Council and the Center have participated in the public debate around the DuPont waste pile at Cherry Island since early 2005 when public comment and public hearings were held by DNREC regarding DuPont's proposed plan of remedial action for the 550,000 tons of contaminated material stored there. The Center contributed to the pressure for a third party study and sought to ensure that it would be truly independent.

Summary:

The Council and the Center continue to hold the position that the appropriate remedial alternative for the K178 Iron Rich pile is for removal to a RCRA-permitted disposal facility, and that such an alternative should be implemented as soon as is

feasible. We believe that the Independent Study ("the Report") recently made public provides DNREC with adequate support for withdrawing from a 2001 agreement to permit a cap-in-place remediation of the Pile. The deficiencies identified by the Report in DuPont's data and analysis were so prevalent that such withdrawal is clearly justified. However, to the extent DNREC believes it remains bound to the earlier agreement with DuPont absent further evidence of unacceptable risks, then the Report provides able guidance to obtain that evidence.

Concerns about DNREC's Role:

While the Center commends DNREC for selecting Schnabel Engineering, a firm which has apparently carried out its charge with requisite fairness and independence, it is somewhat disquieting that DNREC possessed the report for months and held discussions with Schnabel regarding its content. It is unknown what changes were insisted upon by DNREC, and whether any "hard edges" in Schnabel's findings may have been removed. The Center believes that DNREC should make publicly available the prior drafts of the report so that such concerns may be addressed. DNREC, by its 2001 action to enter into a Voluntary Cleanup Agreement with DuPont in advance of the effective date of EPA's hazardous waste listing of the "iron rich" material, staked out a position on the fate of the 550,000 tons of contaminants that it has thus far been unwilling to reconsider. Due to this commitment, DNREC cannot really be viewed as an unbiased intermediary between the public and the legislature and the independent analysis they have demanded.

The Report:

Nevertheless, the independent study has clearly been a useful exercise, although it has not yet been allowed to fulfill its potential. As the Center predicted, additional data is necessary to assess the risks posed by the site. Schnabel recommends that such data be collected, but it should have been given the resources 15 months ago to conduct the necessary sampling and analysis at the outset. If that had been done, a great deal of delay could have been avoided. It must be stressed, however, that it is better to have the data late than not at all. We urge DNREC to secure sufficient funds from DuPont to procure ample sampling and analysis from the media that Schnabel recommends. Specifically, additional samples must be drawn from the iron rich itself, from the dredge material beneath it, from riverside and Shellpot creek side sediments, and from soils in nearby neighborhoods to confirm quantities of the K178 contaminants that have blown off the site. In addition, monitoring wells must be drilled in the locations recommended by Schnabel to fill data gaps in determinations of impacts to the aquifer.

The Report has raised significant doubts as to the current state of containment at the site, as well as to the viability of DuPont's proposed plan, "cap-in-place," as a long term solution for this K-178 hazardous waste. The Report has also stated in no uncertain terms that the characterization of the Iron Rich material and the dredge material upon which it is situated is incomplete and inadequate as a basis for risk assessment. Schnabel has also

described the information presented by DuPont as "haphazardly extracted" from prior reports and studies. Further, the Report indicates that remedial alternatives were either not examined at all or given very conclusory treatment and rejection. Even their selected remedial option was apparently not well-supported. The sense is created that DuPont has sought to dispense with this massive pile of industrial waste as cheaply as possible. To the extent that a proper analysis would in of itself cost more to perform, or could lead to conclusions that more costly remedial alternatives were appropriate, even this has been avoided by DuPont.

One of the most striking aspects of the DuPont plan to cap-in-place is its assertion that the "geosynthetic membrane" that will serve as the cap for the pile has a lifespan of 250-450 years. This was an extraordinary claim that we have questioned at public hearings in the past. The Schnabel analysis appears to validate those concerns, and points to significant studies which controvert DuPont's claims. On lifespan of the cap, for example, the Schnabel report cites good authority which places the proper useful life of a geosynthetic membrane in the field at a mere 25 years. This effectively illustrates the essential defectiveness of DuPont's plan.

Another Schnabel finding that comes as no surprise to us is DuPont's improper rejection of removal of the pile. Schnabel found that DuPont's alleged fear of the risk associated with transporting the material was inconsistent at best with the company's current practices and with accepted risk management. Schnabel points out that DuPont had apparently managed to haul the material from its Edgemoor Titanium Dioxide plant to the Cherry Island pile location without too much trouble. Schnabel also notes that rather than nearly 30 million miles of truck transport to send the K-178 to a disposal facility, it should be brought back to Edgemoor and loaded on rail cars just as is done with the same waste currently being generated by DuPont's facility, before shipment to South Carolina for disposal. The 89,000 miles of truck transport needed for such an option reduces the supposed risks by orders of magnitude. It would certainly appear that the economics of the removal would improve significantly by attempting such a method or the Scenario 2, rail spur approach Schnabel recommends.

Even the detailed analysis of the two options presented by DNREC—cap and removal—was deficient in numerous ways as to its satisfaction of the 10 criteria for the analysis required by DNREC. It seems that the effort expended by DuPont on individual criterion correlated with the overall outcome it wanted to convey.

Regarding hydrogeology, Schnabel noted that improper groundwater conductivity appears to have been used by DuPont with regard to hexachlorobenzene (HCB). This is of added significance because HCB was one of the constituents of concern found at levels exceeding applicable standards in the iron rich.

The Report recommends that 5 additional samples of iron rich material be taken and tested for nine different criteria. It calls for samples of dredge material to be tested for ten criteria, and also calls for new groundwater tests for four criteria from a new well to be installed downgradient from the pile. It is extremely disturbing to realize that no

such well has been installed as to this point. It should also be noted that each of the media to be tested include dioxins/furans as one of the criteria.

Schnabel also notes that DuPont's chosen alternative presumes that the land will never be used again—fenced and padlocked. This does not appear to be a prudent use of Delaware River waterfront. The time is at hand to instead remove this affront to the public and good government and properly remediate the land so it can be put to worthwhile use.

Public Comment:

The public comment period provided by DNREC has been 35 days. Given the length of the report and the complexity of the subject matter, this is clearly inadequate to ensure thoughtful public consideration and comment will be received from the public. Given that it is nearly two years since the call for an independent study, an additional few weeks for public review cannot legitimately be objected to on the basis of time pressure. In order to maximize public understanding for purposes of obtaining the best possible comments, the Center requests that DNREC hold a public meeting as soon as is reasonable at which DNREC officials and a Schnabel representative can provide information and answer questions, followed by an additional two week comment period.

Thank you for the opportunity to comment on this important document and issue. The Center and the Council reserve their right to submit supplemental comment if the request for additional time is granted.

Respectfully submitted,

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Also on Behalf of Clean Air Council